

Title: Regression trees

Author: Aleh Masaila

Department: Department of Probability and Mathematical Statistics

Supervisor: Mgr.Tomáš Hanzák

Abstract: Although regression and classification trees are used for data analysis for several decades, they are still in the shadow of more traditional methods such as linear or logistic regression. This paper aims to describe a couple of the most famous regression trees and introduce a new direction in this area - a combination of regression trees and committee methods, so called the regression forests. There is a practical part of work where we try properties, strengths and weaknesses of the examined methods on real data sets.

Keywords: regression tree, CART, MARS, regression forest